To: Summerhays, John[Summerhays.John@epa.gov]; Schaufelberger,

Daniel[schaufelberger.daniel@epa.gov]

From: Robinson, Randall

Sent: Wed 3/30/2016 4:48:44 PM

Subject: RE: USG Modeling

We could probably do an updated run pretty quickly.....sometime this week. In order to do a "source group thing" (John, we may need to revisit your honorary modeler status) I'd need assistance identifying which point source is the cupola.

Randy Robinson

Air and Radiation Division

EPA Region 5

312 353-6713

From: Summerhays, John

Sent: Wednesday, March 30, 2016 11:29 AM

To: Schaufelberger, Daniel <schaufelberger.daniel@epa.gov>; Robinson, Randall

<robinson.randall@epa.gov>
Subject: RE: USG Modeling

I'd appreciate a rerun sooner rather than later, because this is the basis for listing them. While you're at it, can you do a source group thing that splits out the contribution from the cupola versus from the rest of the facility? That way, I can more accurately scale what happens with different cupola emission estimates.

From: Schaufelberger, Daniel

Sent: Wednesday, March 30, 2016 7:28 AM

To: Robinson, Randall < robinson.randall@epa.gov >; Summerhays, John

<<u>Summerhays.John@epa.gov</u>> **Subject:** RE: USG Modeling

OK. Thanks for reviewing this for me. At some point, we'll probably need to re-run the

Walworth file with the proper settings.

Daniel Schaufelberger

U.S. Environmental Protection Agency, Region 5

77 West Jackson Blvd. (AE-17J) Chicago, IL 60604-3590 Phone: (312) 886-6814

From: Robinson, Randall

Sent: Tuesday, March 29, 2016 4:00 PM

To: Schaufelberger, Daniel <schaufelberger.daniel@epa.gov>; Summerhays, John

<<u>Summerhays.John@epa.gov</u>>

Subject: USG Modeling

Hello,

This is text from the AERMOD User's Guide.

"Whenever a pollutant ID of 'NO2' or 'SO2' is specified and 1-hour averages are selected, the options to calculate 1-hour NO2 or SO2 design values based on the distribution of daily maximum 1-hour values will be allowed, unless short-term averaging periods other than 1-hour are also specified on the AVERTIME keyword. If other short-term averages are specified, non-fatal warning messages will be generated and the options for processing 1-hour NO2 or SO2 design values will be disabled."

Jaime requested output of both 1hr and 3hr averaging times in the CO section next to the AVERTIME keyword. Consequently, the model disabled the design value processing and instead gives the short-term average value for the period modeled. In this case, it was 5 years of met data. This wasn't an issue with Red Wing. That input file only listed 1 next to AVERTIME and the output tables clearly state that the values are:

THE SUMMARY OF MAXIMUM 4TH-HIGHEST MAX DAILY 1-HR RESULTS AVERAGED OVER 5 YEARS

To be honest, the restriction on the number of AVERTIME entries was not something I was aware of.
Randy
Randy Robinson
Air and Radiation Division
EPA Region 5
312 353-6713